WHAT IS CLAIMED IS:
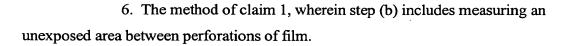
1. A method for forming an estimated optical density vs. exposure relationship of a photographic medium, the method comprising the steps of:

a) determining a reference density vs. exposure relationship for the photographic medium;

b) performing one measurement of minimum density in one area of minimum density of the photographic medium; and

c) forming the estimated density vs. exposure relationship for the photographic medium by adjusting the density values of the reference density vs. exposure relationship according to the differences of the minimum density values of the reference density vs. exposure relationship from the measured corresponding minimum density values of the photographic medium.

2. A method of claim 1 further comprising the step of using steps (a) through (c) for (d) forming a transformation for transforming image-bearing signals derived from the photographic medium to image-bearing signals that include the relative exposure values of the photographic medium.

3. The method of claim 2 further comprising applying to the image-bearing signals derived from the photographic medium the transformation of step (d).

4. The method of claim 1, wherein step (a) includes determining the reference density vs. exposure relationship by measuring and averaging density vs. exposure relationship for a plurality of samples of the photographic medium, or determining the relationship based on product specifications of a manufacturer of the medium.

5. The method of claim 1, wherein step (b) includes measuring an unexposed area of minimum density within an inter-frame gap between frames of film.

6. The method of claim 1, wherein step (b) includes measuring an unexposed area between perforations of film.

7. The method of claim 1, wherein step (b) includes measuring an unexposed area at a beginning and/or an end of a roll of film.

8. The method of claim 1, wherein step (b) includes performing multiple measurements of a single area and/or multiple measurements of multiple areas.

9. An apparatus for forming an estimated density versus exposure relationship of a photographic medium, the apparatus comprising:

a) means for determining a reference density vs. exposure relationship for the photographic medium;

b) means for performing at least one measurement of at least one area of minimum density of the photographic medium; and

c) means for forming said estimated density vs. exposure relationship for the photographic medium by adjusting the density values of the reference density vs. exposure relationship according to the differences of the minimum density values of the reference density versus exposure relationship and the measured minimum density values of the photographic medium.

10. The apparatus of claim 9 further comprising means for forming a transformation for transforming image-bearing signals derived from the photographic medium to image-bearing signals that include the relative exposure values of the photographic medium by using means (a) through (c).

11. The apparatus of claim 10 further comprising means for applying to the image-bearing signals derived from the photographic medium the transformation of claim 10.

12. The apparatus of claim 9, wherein the means for determining a reference density vs. exposure relationship includes means for determining the reference density vs. exposure relationship by measuring and averaging density vs. exposure relationship for a plurality of samples of the medium, or means for determining the relationship based on product specifications of a manufacturer of the medium.

13. The apparatus of claim 9, wherein the means for performing one measurement includes means for measuring unexposed inter-frame gap between frames of film.

14. The apparatus of claim 9, wherein the means for performing one measurement includes means for measuring an unexposed area between perforations of film.

15. The apparatus of claim 9, wherein the means for performing one measurement includes means for measuring unexposed area at a beginning and/or an end of a roll of film.

16. The apparatus of claim 9, wherein the means for performing one measurement includes means for performing multiple readings of a single area and/or multiple readings of multiple areas.